



# TORQ Analysis of Paper Goods Machine Setters, Operators, and Tenders to Job Printers

## INPUT SECTION:

Transfer	Title	O*NET	Filters		
From Title:	Paper Goods Machine Setters, Operators, and Tenders	51-9196.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Job Printers	51-5021.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

## OUTPUT SECTION:

Grand TORQ:

88

Ability TORQ		Skills TORQ		Knowledge TORQ	
Level	91	Level	88	Level	84

Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Written Comprehension	44	9	56	Time Management	60	12	77	Mechanical	64	9	70
Reaction Time	50	9	56	Quality Control Analysis	62	12	70	Production and Processing	61	6	76
Trunk Strength	46	7	56	Active Listening	51	8	72				
Near Vision	53	5	65	Reading Comprehension	61	7	75				
Visualization	42	5	56	Equipment Maintenance	62	4	74				
Information Ordering	46	4	59	Troubleshooting	57	4	73				
Selective Attention	48	4	59	Operation Monitoring	64	2	69				
Multilimb Coordination	42	3	56								
Visual Color Discrimination	42	3	53								
Rate Control	35	3	50								
Speech Clarity	37	3	50								
Arm-Hand Steadiness	44	2	68								
Speech Recognition	37	2	53								
Oral Expression	44	2	50								
Manual Dexterity	42	1	59								

LEVEL and IMPT (IMPORTANCE) refer to the Target Job Printers. GAP refers to level difference between Paper Goods Machine Setters, Operators, and Tenders and Job Printers.

## ASK ANALYSIS



## Ability Level Comparison - Abilities with importance scores over 50

Description	Paper Goods Machine Setters, Operators, and Tenders	Job Printers	Importance
Problem Sensitivity	39	35	68
Arm-Hand Steadiness	42	44	68
Control Precision	48	44	65
Near Vision	48	53	65
Information Ordering	42	46	59
Selective Attention	44	48	59
Manual Dexterity	41	42	59
Written Comprehension	35	44	56
Perceptual Speed	41	41	56
Visualization	37	42	56
Multilimb Coordination	39	42	56
Reaction Time	41	50	56
Trunk Strength	39	46	56
Oral Comprehension	44	44	53
Visual Color Discrimination	39	42	53
Speech Recognition	35	37	53
Oral Expression	42	44	50
Finger Dexterity	42	41	50
Rate Control	32	35	50
Speech Clarity	34	37	50

## Skill Level Comparison - Abilities with importance scores over 69

Description	Paper Goods Machine Setters, Operators, and Tenders	Job Printers	Importance
Time Management	48	60	77
Reading Comprehension	54	61	75
Equipment Maintenance	58	62	74
Troubleshooting	53	57	73
Active Listening	43	51	72
Quality Control Analysis	50	62	70
Operation Monitoring	62	64	69

## Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Paper Goods Machine Setters, Operators, and Tenders	Job Printers	Importance
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Production and Processing	55	61	76
Mechanical	55	64	70

### Experience & Education Comparison

Related Work Experience Comparison			Required Education Level Comparison		
Description	Paper Goods Machine Setters, Operators, and Tenders	Job Printers	Description	Paper Goods Machine Setters, Operators, and Tenders	Job Printers
10+ years	0%	0%	Doctoral	0%	0%
8-10 years	3%	1%	Professional Degree	0%	0%
6-8 years	0%	13%	Post-Masters Cert	0%	0%
4-6 years	0%	3%	Master's Degree	0%	0%
2-4 years	0%	35%	Post-Bachelor Cert	0%	0%
1-2 years	41%	26%	Bachelors	0%	9%
6-12 months	1%	3%	AA or Equiv	0%	2%
3-6 months	5%	0%	Some College	0%	9%
1-3 months	16%	3%	Post-Secondary Certificate	0%	26%
0-1 month	3%	9%	High School Diploma or GED	74%	28%
None	27%	2%	No HSD or GED	24%	22%

Paper Goods Machine Setters, Operators, and Tenders	Job Printers
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Most Common Educational/Training Requirement:	
Moderate-term on-the-job training	Long-term on-the-job training

Job Zone Comparison	
<p><b>2 - Job Zone Two: Some Preparation Needed</b></p> <p>Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty.</p> <p>These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.</p> <p>Employees in these occupations need anywhere from a few months to one year of working with experienced employees.</p>	<p><b>3 - Job Zone Three: Medium Preparation Needed</b></p> <p>Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.</p> <p>Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.</p> <p>Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.</p>

### Tasks

Paper Goods Machine Setters, Operators, and Tenders	Job Printers
Core Tasks	Core Tasks
Generalized Work Activities:	Generalized Work Activities:
<ul style="list-style-type: none"> <li>Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).</li> <li>Monitor Processes, Materials, or</li> </ul>	<ul style="list-style-type: none"> <li>Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).</li> <li>Getting Information - Observing, receiving, and otherwise obtaining</li> </ul>



surroundings - Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems.

- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.

#### Specific Tasks

##### Occupation Specific Tasks:

- Adjust guide assemblies, forming bars, and folding mechanisms according to specifications, using hand tools.
- Cut products to specified dimensions, using hand or power cutters.
- Disassemble machines to maintain, repair, or replace broken or worn parts, using hand or power tools.
- Examine completed work to detect defects and verify conformance to work orders, and adjust machinery as necessary to correct production problems.
- Fill glue and paraffin reservoirs, and position rollers to dispense glue onto paperboard.
- Install attachments to machines for gluing, folding, printing, or cutting.
- Lift tote boxes of finished cartons, and dump cartons into feed hoppers.
- Load automatic stapling mechanisms.
- Measure, space, and set saw blades, cutters, and perforators, according to product specifications.
- Monitor finished cartons as they drop from forming machines into rotating hoppers and then into gravity feed chutes, in order to prevent jamming.
- Observe operation of various machines to detect and correct machine malfunctions such as improper forming, glue flow, or pasteboard tension.
- Place rolls of paper or cardboard on machine feedtracks, and thread paper through gluing, coating, and slitting rollers.
- Remove finished cores, and stack or place them on conveyors for transfer to other work areas.
- Stamp products with information such as dates, using hand stamps or automatic stamping devices.
- Start machines and move controls to regulate tension on pressure rolls, to synchronize speed of machine components, and to adjust temperatures of glue or paraffin.

information from all relevant sources.

- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Monitor Processes, Materials, or Surroundings - Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems.
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.

#### Specific Tasks

##### Occupation Specific Tasks:

- Clean ink rollers after runs are completed.
- Design and set up product compositions and page layouts.
- Examine proofs or printed sheets in order to detect errors and to evaluate the adequacy of impression clarity.
- Fill ink fountains and move levers to adjust the flow of ink.
- Lay forms on proof presses; then ink type, fasten paper to press rollers, and pull rollers over forms to make proof copies.
- Operate cylinder or automatic platen presses to print job orders.
- Position forms (type in locked chases) on beds of presses; then tighten clamps, using wrenches.
- Reset type to correct typographical errors.
- Set feed guides according to sizes and thicknesses of paper.

#### Detailed Tasks

##### Detailed Work Activities:

- adjust production equipment/machinery setup
- arrange galley setups of type
- assure quality control in printing processes
- clean equipment or machinery
- collate printed materials
- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble manufactured products by hand
- identify color or balance
- load or unload material or workpiece into machinery
- make independent judgment in assembly procedures
- operate printing equipment/machinery
- proofread printed or written material
- set page layout or composition



## Detailed Tasks

## Detailed Work Activities:

- adjust production equipment/machinery setup
- examine products or work to verify conformance to specifications
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- monitor production machinery/equipment operation to detect problems
- move or fit heavy objects
- operate pulp or paper making equipment
- read specifications
- read work order, instructions, formulas, or processing charts
- set up production equipment or machinery
- understand technical operating, service or repair manuals
- use hand or power tools
- use precision measuring tools or equipment

- set type in compositional sequence
- understand technical operating, service or repair manuals
- use hand or power tools

## Tools - Examples

- Adjustable crescent wrenches
- Air knives
- Conductivity meters
- Densitometers
- Desktop computers
- Digital cameras
- Process cameras
- Grease guns
- Allen wrenches
- Shrink wrappers
- Laminators
- Micrometers
- Laptop computers
- Offset printing plate processing equipment
- Offset presses
- Paper drills
- Back jiggers
- Personal computers
- pH indicators
- Photocopying equipment
- Printing platemakers
- Paper folders
- Power paper cutters
- Web presses
- Color separation scanners
- Slotted screwdrivers
- Silk screen vacuum printer frames
- Stapling machines
- Thermal book binders

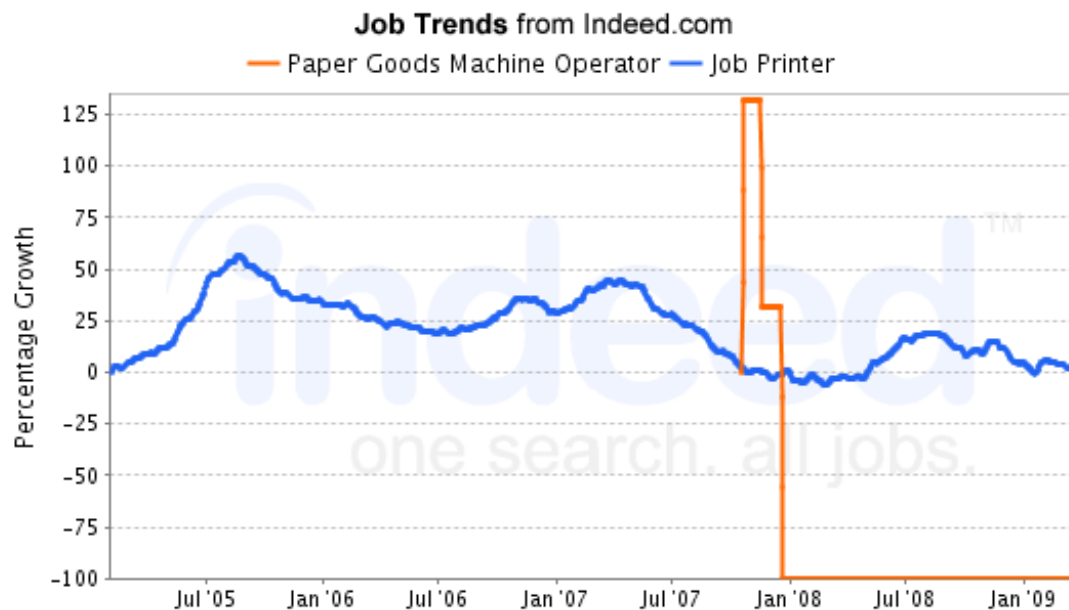


## Labor Market Comparison

Description	Paper Goods Machine Setters, Operators, and Tenders	Job Printers	Difference
Median Wage	\$ 38,230	\$ 31,890	\$ ( 6,340)
10th Percentile Wage	\$ 25,850	\$ 18,950	\$ ( 6,900)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 45,200	\$ 39,960	\$ ( 5,240)
90th Percentile Wage	\$ 51,680	\$ 46,960	\$ ( 4,720)
Mean Wage	\$ 38,330	\$ 31,790	\$ ( 6,540)
Total Employment - 2007	910	140	-770
Employment Base - 2006	951	177	-774
Projected Employment - 2016	700	159	-541
Projected Job Growth - 2006-2016	-26.4 %	-10.2 %	16.2 %
Projected Annual Openings - 2006-2016	23	2	-21

## National Job Posting Trends

Trend for Paper Goods Machine Setters, Operators, and Tenders

Trend for  
Job  
PrintersData from [Indeed](http://Indeed.com)

## Recommended Programs

Printing Management



**Printing Management.** A program that prepares individuals to apply technical and managerial knowledge and skills to the processes and procedures of managing printing operations from initial design through finished product distribution. Includes instruction in the principles of graphic communications design and production; quality control; printing operations management; computerization; printing plant management; business finance and marketing; logistics and distribution; personnel supervision and leadership; and professional standards in the graphic communications industry.

No schools available for the program

#### Graphic and Printing Equipment Operator, General Production

**Graphic and Printing Equipment Operator, General Production.** A program that generally prepares individuals to apply technical knowledge and skills to plan, prepare, and execute a variety of commercial and industrial graphic communications jobs. Includes instruction in the operation and maintenance of mechanical, electronic, and digital graphic, printing, and finishing equipment; and related processes.

Institution	Address	City	URL
Central Maine Community College	1250 Turner St	Auburn	<a href="http://www.cmcc.edu">www.cmcc.edu</a>
Central Maine Community College	1250 Turner St	Auburn	<a href="http://www.cmcc.edu">www.cmcc.edu</a>

### Maine Statewide Promotion Opportunities for Paper Goods Machine Setters, Operators, and Tenders

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	100	2	910	\$38,230.00	\$0.00	-26%	23
51-9121.00	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	84	2	850	\$38,860.00	\$630.00	-26%	19
51-4011.00	Computer-Controlled Machine Tool Operators, Metal and Plastic	82	2	720	\$40,490.00	\$2,260.00	6%	12
43-5053.00	Postal Service Mail Sorters, Processors, and Processing Machine Operators	81	2	970	\$41,950.00	\$3,720.00	-12%	10
51-9011.00	Chemical Equipment Operators and Tenders	81	2	0	\$38,790.00	\$560.00	-2%	5
51-4041.00	Machinists	78	3	1,860	\$41,560.00	\$3,330.00	4%	35
51-4192.00	Lay-Out Workers, Metal and Plastic	77	2	180	\$43,870.00	\$5,640.00	-24%	3
53-6051.07	Transportation Vehicle, Equipment and Systems Inspectors, Except Aviation	77	3	60	\$42,890.00	\$4,660.00	5%	2



49-2094.00	Electrical and Electronics Repairers, Commercial and Industrial Equipment	76	3	440	\$49,450.00	\$11,220.00	-19%	15
51-8013.00	Power Plant Operators	75	3	480	\$50,240.00	\$12,010.00	10%	21
49-9012.00	Control and Valve Installers and Repairers, Except Mechanical Door	74	3	170	\$47,860.00	\$9,630.00	-9%	3
51-4111.00	Tool and Die Makers	74	3	160	\$51,670.00	\$13,440.00	-11%	2
49-9096.00	Riggers	73	3	250	\$39,140.00	\$910.00	-12%	2
51-1011.00	First-Line Supervisors/Managers of Production and Operating Workers	73	3	3,750	\$45,510.00	\$7,280.00	-4%	65
47-2011.00	Boilermakers	72	4	60	\$39,260.00	\$1,030.00	12%	3

### Top Industries for Job Printers

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Printing and related support activities	323100	61.85%	29,835	23,639	-20.77%
Newspaper publishers	511110	9.63%	4,645	3,980	-14.33%
Advertising and related services	541800	4.12%	1,989	2,870	44.31%
Self-employed workers, primary job	000601	3.28%	1,580	1,684	6.54%
Elementary and secondary schools, public and private	611100	1.19%	573	604	5.38%
Management of companies and enterprises	551100	1.13%	544	627	15.28%
Specialized design services	541400	1.04%	501	670	33.81%
Colleges, universities, and professional schools, public and private	611300	0.86%	416	465	11.87%
Paper and paper product merchant wholesalers	424100	0.83%	401	429	6.83%
General medical and surgical hospitals, public and private	622100	0.72%	345	382	10.71%
State government, excluding education and hospitals	929200	0.50%	241	236	-1.87%
Local government, excluding education and hospitals	939300	0.45%	219	246	12.34%
Converted paper product manufacturing	322200	0.39%	186	156	-16.08%
Junior colleges, public and private	611200	0.27%	131	144	10.49%
Computer systems design and related services	541500	0.24%	114	154	35.01%





### Top Industries for Paper Goods Machine Setters, Operators, and Tenders

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Converted paper product manufacturing	322200	60.48%	68,412	57,411	-16.08%
Pulp, paper, and paperboard mills	322100	21.93%	24,800	17,202	-30.64%
Printing and related support activities	323100	8.22%	9,293	7,363	-20.77%
Newspaper publishers	511110	1.36%	1,536	1,316	-14.33%
Plastics product manufacturing	326100	1.27%	1,439	1,525	6.00%
Wholesale electronic markets and agents and brokers	425100	0.67%	762	865	13.48%
Employment services	561300	0.55%	618	783	26.56%
Animal slaughtering and processing	311600	0.46%	521	595	14.13%
Advertising and related services	541800	0.40%	448	505	12.83%
Paper and paper product merchant wholesalers	424100	0.39%	440	470	6.83%
Other general purpose machinery manufacturing	333900	0.19%	219	198	-9.73%
Miscellaneous durable goods merchant wholesalers	423900	0.09%	100	114	14.81%
Warehousing and storage	493100	0.07%	76	101	33.58%
Other electrical equipment and component manufacturing	335900	0.06%	69	64	-7.34%
Fruit and vegetable preserving and specialty food manufacturing	311400	0.05%	61	55	-9.33%